Serial No.: 10/655,768

Filed: September 5, 2003

Page: 2

## **AMENDMENTS TO THE CLAIMS**

This listing of claims replaces all prior versions and listings of claims in the application.

## In the claims:

Please amend the claims as follows:

## Listing of the claims

1. (Currently amended) A <u>computer-implemented</u> method of developing an <u>a software</u> application, the method comprising:

identifying pattern types corresponding to requirements for an the software application to be developed, wherein the pattern types are identified from one or more of process patterns, user interface (UI) patterns, and generic object patterns;

selecting patterns that best match the requirements from a set of available patterns; and configuring the selected patterns according to the requirements to produce an the software application.

2. (Currently amended) The computer-implemented method of claim 1 further comprising:

gathering additional <u>software</u> application requirements based on a structure associated with the selected patterns; and

combining the gathered additional <u>software</u> application requirements with the selected patterns.

- 3. (Currently amended) The <u>computer-implemented</u> method of claim 1 wherein the selected patterns include process patterns corresponding to different levels of a process pattern hierarchy.
- 4. (Currently amended) The <u>computer-implemented</u> method of claim 3 wherein the process pattern hierarchy includes business process patterns, work process patterns, and action patterns.
- 5. (Currently amended) The <u>computer-implemented</u> method of claim 1 wherein the generic object patterns include collaboration object patterns, business object patterns, and business role object

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 3

patterns.

6. (Currently amended) The method of claim 1 wherein the user interface <u>UI</u> patterns include personal support patterns, execution framework patterns, and activity patterns.

7. (Currently amended) The <u>computer-implemented</u> method of claim 1 wherein selecting patterns that best match the identified requirements from a set of available patterns comprises:

determining that a work process pattern is unavailable to satisfy the requirements; and constructing a work process using action patterns.

8. (Currently amended) The <u>computer-implemented</u> method of claim 1 wherein identifying pattern types is performed by a user selecting from a set of available pattern types;

selecting patterns is performed by a user selecting from the set of available patterns of the identified pattern type; and

configuring the selected patterns is performed by a user incorporating the requirements into the selected patterns.

- 9. (Currently amended) The <u>computer-implemented</u> method of claim 1 further comprising identifying and configuring content patterns that correspond to the requirements.
- 10. (Currently amended) A <u>computer-implemented</u> method of developing an <u>a software</u> application, the method comprising:

providing a library of patterns including at least two different types of patterns, wherein the pattern types are selected from one or more of process patterns, object patterns, user interface (UI) patterns, and content patterns;

identifying requirements for a desired software application; receiving a user selection of patterns from the library of patterns; and configuring the selected patterns in accordance with the identified requirements to generate

the desired ereate a software application.

11. (Currently amended) The computer-implemented method of claim 10 wherein the library of

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 4

patterns includes process patterns corresponding to a plurality of discrete levels of a process pattern hierarchy.

- 12. (Currently amended) The <u>computer-implemented</u> method of claim 11 further comprising constructing a procedure from lower level process patterns when a higher level process pattern that satisfies the identified requirements is unavailable.
- 13. (Currently amended) The <u>computer-implemented</u> method of claim 10 further comprising using the selected patterns to identify additional requirements for the <u>desired</u> software application.
- 14. (Currently amended) The <u>computer-implemented</u> method of claim 10 further comprising: identifying work roles to be supported by the <u>desired</u> software application; identifying a work style and a role content associated with each work role; and selecting and configuring content patterns and <u>user interface UI</u> patterns that correspond to the identified work style and role content.
- 15. (Currently amended) The <u>computer-implemented</u> method of claim 14 wherein the library of patterns includes <u>user interface</u> <u>UI</u> patterns corresponding to a plurality of discrete levels of a process pattern hierarchy.
- 16. (Currently amended) The <u>computer-implemented</u> method of claim 10 further comprising: identifying a process to be performed in the software application; selecting at least one process pattern corresponding to the identified process; identifying collaboration needs for the identified process; and selecting collaboration patterns corresponding to the identified collaboration needs.
- 17. (Currently amended) The <u>computer-implemented</u> method of claim 16 further comprising: identifying work roles associated with the identified process; and selecting content patterns and user interface patterns that correspond to the identified work roles.

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 5

18. (Currently amended) A <u>computer-implemented</u> method of developing an <u>a software</u> application, the method comprising:

providing receiving a set of available patterns at different discrete levels of a process hierarchy, wherein the patterns include business process patterns, work process patterns, and business action patterns;

identifying receiving requirements identified for a business process;

mapping the identified requirements to patterns from the available patterns by mapping process-related requirements to a corresponding business process pattern, wherein process-related requirements for which a business pattern is unavailable are mapped to a corresponding work process pattern, and process-related requirements for which a work process pattern is unavailable are mapped to a corresponding business action pattern.

19. (Currently amended) The <u>computer-implemented</u> method of claim 18 further comprising:

identifying collaboration needs and job roles that correspond to a work process pattern to which the identified requirements are mapped; and

mapping requirements to patterns relating to collaboration functions and job role functions.

- 20. (Currently amended) The <u>computer-implemented</u> method of claim 18 wherein the business process patterns represent an <u>a software</u> application scenario, the work process patterns represent guided procedure templates, and the business action patterns represent guided procedure steps.
- 21. (Currently amended) The <u>computer-implemented</u> method of claim 18 further comprising: identifying a job role associated with a process pattern; segmenting the job role into work roles; and mapping the work roles to content patterns and <u>user-interface UI</u> patterns.
- 22. (Currently amended) The <u>computer-implemented</u> method of claim 21 wherein the content patterns and <u>user interface UI</u> patterns are selected according to a work style associated with the work role and a role content for the work role.

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 6

23. (Currently amended) The computer-implemented method of claim 22 further comprising:

identifying work scenarios associated with the work role; and

mapping the work scenarios to execution framework and activity user interface UI patterns.

24. (Currently amended) The <u>computer-implemented</u> method of claim 18 wherein the set of available patterns are provided in a pattern library;

identifying requirements is performed by one or more users; and

mapping the identified requirements to patterns is performed by one or more users incorporating the identified requirements into the patterns based on structures associated with the patterns.

25. (Currently amended) An article comprising a machine-readable medium storing <u>a data structure</u> including definitions of <u>a plurality of patterns</u> for use in constructing <del>an</del> <u>a software</u> application, the definitions of the plurality of patterns in the data structure comprising:

business action patterns that define guided procedure steps;

work process patterns that define guided procedure templates, wherein each work process pattern comprises a plurality of business action patterns;

business process patterns that define a generic <u>software</u> application scenario, wherein each business process pattern comprises a plurality of work process patterns; and

wherein the patterns are accessible for use in constructing an application by configuring the patterns according to identified requirements for the <u>software</u> application.

- 26. (Currently amended) The article of claim 25 wherein the <u>plurality of patterns</u> further comprise business object patterns, user interface (<u>UI</u>) patterns, and content patterns that are accessible for use in constructing the <u>software</u> application by configuring selected business object patterns, <del>user interface</del> <u>UI</u> patterns, and content patterns according to identified requirements for the <u>software</u> application.
- 27. (Currently amended) The article of claim 25 wherein the <u>plurality of</u> patterns further comprise collaborative content patterns for defining generic collaborative structures and the collaborative content patterns are accessible for use in constructing the <u>software</u> application by configuring the

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 7

collaborative content patterns according to identified requirements for the software application.

28. (Currently amended) The article of claim 25 wherein the <u>plurality of</u> patterns further comprise user-centric patterns comprising:

work style content patterns for defining generic work style contents that relate to factors that drive different users' work;

role content patterns for defining generic roles that can be assigned to different users; and wherein the work style content patterns and the role content patterns are accessible for use in constructing the application by configuring the patterns according to identified requirements for the <u>software</u> application.

- 29. (Currently amended) The article of claim 25 wherein the <u>plurality of patterns</u> further comprise user-centric patterns comprising patterns relating to work scenarios for roles that can be assigned to different users, wherein the work scenario patterns are accessible for use in constructing an <u>the software</u> application by configuring the patterns according to identified requirements for the <u>software</u> application.
- 30. (Currently amended) A <u>computer-implemented</u> method of developing an <u>a software</u> application, the <u>computer-implemented</u> method comprising:

identifying a job role within an enterprise;

segmenting the job role into work roles associated with the job role;

mapping each work role to at least one of a work style content pattern and a role content pattern;

identifying work scenarios associated with each work role; and mapping each work scenario to at least one work scenario user interface (UI) pattern.

- 31. (Currently amended) The <u>computer-implemented</u> method of claim 30 further comprising configuring at least one personal resource page, based on the work style content pattern, in accordance with a personal support <u>user interface UI</u> pattern.
- 32. (Currently amended) The computer-implemented method of claim 30 wherein the at least one

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 8

work scenario user interface <u>UI</u> pattern comprises at least one execution framework pattern and at least one activity pattern.

33. (Currently amended) The <u>computer-implemented</u> method of claim 30 further comprising: identifying a work process associated with a work scenario; and mapping each work scenario to a work process pattern corresponding to the identified work process.

34. (Currently amended) A <u>computer-implemented</u> method of developing an <u>a software</u> application, the method comprising:

identifying a set of requirements for a business process software application;

mapping the identified requirements to a work process pattern that represents a guided procedure template for a work process;

identifying a plurality of job roles associated with the work process pattern;

segmenting each job role into work roles; and

mapping the work role to a set of patterns comprising one or both of a content pattern and a user interface (UI) pattern.

35. (Currently amended) The computer-implemented method of claim 34 further comprising:

identifying collaboration needs associated with the work process based on the identified requirements;

selecting a collaborative content pattern corresponding to the identified collaboration needs; and

mapping the collaboration needs to the selected collaborative content pattern.

36. (Currently amended) A <u>computer-implemented</u> method of developing <u>an a software</u> application, the method comprising:

segmenting a job role in an enterprise into work roles;

configuring a plurality of personal support user interface (UI) patterns in accordance with work styles associated with the identified work roles to produce personal support pages, wherein each personal support user interface UI pattern corresponds to a work style;

Serial No.: 10/655,768

Filed: September 5, 2003

Page: 9

identifying a plurality of work scenarios associated with the work roles;

mapping each work scenario to at least one user interface <u>UI</u> pattern relating to an execution mode to produce an execution framework page, wherein each personal support page contains links to the execution framework pages.

37. (Currently amended) The computer-implemented method of claim 36 further comprising:

identifying work activities associated with each work scenario; and

mapping each work activity to a corresponding activity pattern to generate create activity pages, wherein each execution framework page contains links to selected activity pages and the activity pages relate to specific activities within the execution framework.